Letter by Castilla-Guerra and Fernandez-Moreno Regarding Article, “Does Abnormal Circadian Blood Pressure Pattern Really Matter in Patients With Transient Ischemic Attack or Minor Stroke?”

To the Editor:

We read with interest the article by Zhang et al1 on circadian blood pressure (BP) patterns in patients with transient ischemic attack or minor stroke.

We agree with the authors that these patients are no more likely to have abnormal circadian BP patterns. In fact, if we consider that high BP in acute stroke represents, at least in part, a compensatory mechanism to maintain cerebral perfusion,2 then it is likely that the changes in BP values and circadian BP patterns in patients with transient ischemic attack and minor stroke should be scarce.

However, 2 major limitations regarding this article should be noted. First, it is well known that high BP is a common complication after acute stroke, and a transient BP rise can be found even in previous normotensive patients.3 Nevertheless, it is also known that raised BP usually falls spontaneously within a few days and returns to prestroke levels without intervention, with most of this fall occurring within the first 1 to 2 days.4 In this study, patients with stroke were not recruited during the acute phase but within 7 days after their initial event. Therefore, it is likely that BP values and patterns could have changed.

Second, it is striking that among controls the circadian BP patterns were so altered. Only 48.8% of control patients were hypertensives, but >50% of controls (57.3%) presented abnormal BP patterns (37.8% nondipper and 19.5% reverse dipper). These figures are really high, especially if we consider that only ≈50% of patients with hypertension present abnormal circadian BP profile.5

These major limitations could have influenced the results and minimized the differences. It is clear that additional studies are necessary to confirm these findings.

Disclosures

None.

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References

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